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ABSTRACT

Educational cognitive style refers to a person's preferred ways of gathering meaning from surroundings. It involves four groups of behaviors: receiving, expressing, reasoning, and handling the receiving/expressing in specific settings or modalities. A comparison of communication and educational cognitive style shows that several ideas are common to both concepts. By using the results of various cognitive style measurement instruments, teachers can discover how persons prefer to receive messages, the kinds of settings they prefer, the reasoning patterns they use to make decisions, and their preferred methods of expressing messages. When this information is assembled and analyzed, the communication process can be made more personal, thus more effective. (RL)

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EFFECTIVE COMMUNICATIONS

THROUGH

EDUCATIONAL COGNITIVE STYLE

A Position Paper

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EFFECTIVE COMMUNICATION THROUGH EDUCATIONAL COGNITIVE STYLE

The cornerstone of man's social existence is his ability to communicate with his fellow men. The degrees of satisfaction and comfort he enjoys as he lives in his social environments depend upon how effectively he communicates with the participating members of those environments.

To the teachers of English, or of any language, communication, both as a study and an art, is of prime importance. Man must know how to express himself so that he is understood; he must know how to receive expressed information so that he understands others. No one can minimize the essential nature of language to the process of communication; however, proper understanding of the concepts of language is necessary if effective communication is to be developed.

Communication, according to the Webster Collegiate and American College Dictionaries, is the imparting or interchange of thoughts, opinions, or information by speech, writing or signs; the American Peoples' Encyclopedia defines communication as the conveyance of ideas, images, or feeling and emotions from one or more persons to another or others, by signs, or sounds, visual or auditory symbols.....; in Social Foundations of Human Behavior, 2nd edition by Bell and Sirjaniki, we find that communication is a form of interaction that makes one or more individuals aware of the thoughts, desires (and/or) emotions of another by the use of symbols.

Communication thus involves: (1) a sender: (2) a receiver: (3) a message: (4) a means of expressing the message (a language); (5) a reaction.

Effective communication, (that which accomplishes what it intended to accomplish), thus, must take all of these factors into account: and because of these and the multiplicity of idiosyncrasies involved with each and every person, effective communication, is always a complicated task.

The paths of communication are fraught with obstacles. As one considers the following obstacles often encountered, he begins to wonder whether effective communication can ever be realized:

1. Different definition of symbols
2. Lack of precision in language
3. Status difference between the sender and the receiver
4. Non-recognition of purpose of message by the receiver
5. Different levels of maturity and experiences of sender and receiver
6. Prestige of sender as it influences the receiver
7. Receiving with a "hidden agenda" - expecting to hear what one wants to hear
8. Changing the message to fit the needs of the receiver
9. Faculty defects which distort expression and reception (poor vision, hearing, articulation, etc.)
10. Outside influences which interfere or interrupt expression and reception (static, sounds, etc.)

We as educators are concerned with communication. Each one of these obstacles by itself can so effect the delivery or reception of the message that varying degrees of misunderstanding or lack of understanding result. Imagine how poor the degree of communication becomes when some or several of these elements are present when persons or groups are in the process of attempt-

ing to exchange ideas. We realize that competent education depends upon effective communication. When one examines the preceeding lists of obstacles he realizes why even the most conscientious teacher is not able to accomplish what he/she desires. Communication is a personal process since what a person sends and what he receives depend upon the background of experiences and abilities which have made the person what he is. Consequently, learning which is dependent upon communication is personal, too. It should be noted that the relationship which exists between education and communication becomes so involved that it is difficult to discover the beginning of one and the ending of the other.

Communication is primarily a sensory experience, even though some maintain that extra-sensory experiences are possible. Basically, for communication to take place the message must be heard, seen, felt, tasted, smelled or happen in a combination of these. What is heard, seen, etc. is not always the message which the sender contemplated or hoped the receiver would understand. For example, I was once on a golf course, the first time I'd ever played, and expectedly I was playing a slow game, to the point that those players behind me were beginning to bunch up. They were anxious to get along with their game so they began shouting and waving at me hoping that I would understand and speed up. I returned the wave as an act of recognition. However, my non-experience on the course had led me to wave them on. The next thing I knew a golf ball landed near me, and shortly after, the player appeared to play his ball, even though I had not completed the hole. In this instance, there were two messages basically the same, - Arm waving - one was an inquiry if I would either play a faster game or allow the player to pass-on; the other was of recognition but understood or misunderstood to acquiesce to the inquiry.

Too often. the communicator assumes that the receiver and he are attuned. He takes too much for granted. He discovers his messages is either misunderstood or not received at all. James Smith, in his treatise, Creative Teaching of the Language Arts in the Elementary School, discussing the nature of communication, states there are three levels: experience, verbal and conceptual. To understand the meaning of the experience level, one need only use the phrase, "Let me show you how" - a practical demonstration; the verbal, "Let me tell you how to do it", - a descriptive process using words; the conceptual; - relating or differentiating a process or a concept in terms of rules or procedure followed in a previous experience, e.g. a lawn mower engine works on the same combustion principle as the six or eight cylinder automobile engine or attempting to relate the concepts of communication and educational cognitive style.

He continues his discussion of communication by emphasizing (1) that communication is possible through many techniques - body posture, movement, tone of voice, pictures, conversation, writing, combinations of these, etc. (2) that effective communication is rooted in common experience (3) that verbal and conceptual communication is effective when meaningful symbols are assigned to common or like experiences. (4) that the most effective communication is face to face conversation (5) that the how and what of what is said determines the effectiveness of feeling and information communication.

The purpose of this discourse, however, is not to become overly involved in communication per se. but rather, how to assist one to understand the process and to possibly make it more effective through the application of the principles of Educational Cognitive Style.

Educational Cognitive Style is a term used by Dr. Joseph Hill, of the Oakland Community College in Bloomfield, Michigan who was interested in developing a process by which to identify how people preferred to learn. Educational Cognitive Style is defined as a person's preferred way to gather meaning from his surroundings. Educational Cognitive Style is aimed at discovering how comfortable a person feels utilizing different approaches to mastering the many challenges he faces as he lives, in terms of himself, his fellow men and his environment. Educational Cognitive Style is concerned with the receiving, imparting or interchange of thoughts, opinions, or information by speech, writing or signs. Educational Cognitive Style is concerned with the interaction between one or more individuals as they become aware of each others' thoughts, desires, feelings, etc. Educational Cognitive Style is concerned with the personal nature and preferences for communication. Educational Cognitive Style is a positive oriented approach toward understanding, not necessarily why a person prefers doing as he does, but that a person does what he does because he prefers to do it. Once a preferred approach is discovered, however, does not mean that it is the only one to be used in understanding that person but rather one upon which to build success after success of experiences while introducing others gradually to acceptance and greater development.

At an early point in this essay, it was stated that communication involved five components: (1) a sender (2) a receiver (3) a message (4) a means of expressing a message; and (5) a reaction. Though not stated but certainly inherent in the nature of communication is the mediating component of reasoning.

Fundamental to effective communication must be a process by which an individual after receiving the message evaluates its meaning as it affects him, (primarily in its immediacy and possibly in its long term results), prepares a response, and then responds appropriately.

Educational Cognitive Style involves four groups of behaviors: (1) receiving behaviors, (2) expressing behaviors, (3) settings or modalities for handling the receiving and the expressing and (4) the reasoning patterns involved in the process of reception and expression.

If one compares the many aspects of both communication and educational cognitive style he can see the commonality of ideas relevant to both.

Communication is concerned with the receiving of messages: educational cognitive style is concerned with detailing the preferences which an individual has for receiving different kinds of messages. Just as communication is concerned about symbols, so too, is Educational Cognitive Style. Symbols in Educational Cognitive Style are looked upon in terms of words and numbers, oral and written.

Thus Educational Cognitive Style tries to ascertain an individual's preference for:

1. Theoretical Visual Linguistics - printed or written words, phrases
2. Theoretical Visual Quantitative - printed or written numbers, etc.
3. Theoretical Auditory Linguistics - spoken words, phrases, etc.

4. Theoretical Auditory Quantitative - Spoken numbers, etc.

But (as previously discussed in the nature of cummunication) receiving information is not restricted to words and numbers. Sensory input is an essential part of communication. Color, depth, height, odors, flavors, warmth, coarseness, etc. are all part of the reception of information. When we analyze how we began our learning process and communication process, we realize how sensory input was essential both to our language and reasoning development. In an effective communication process it is essential that using different methods and material which relay specific messages to the receiver be used. The expression - a picture is worth a thousand (1000) words - though overused is applicable. A child who has never seen a cow in real life or in picture form cannot be expected to visualize a cow or the purpose of a cow. The story is told that children in the Stuyvesant area of New York City were once asked to describe where milk came from. Some said the milk truck; some said the store, and some said the factory. The children spoke from their experiences or non-experiences and could not visualize the relationship between the cow and the milk. Communication must utilize and build upon sensory experiences. Smith, in discussing how language develops, emphasized that it followed a logical sequence passing through periods of (1) sensory experiences; (2) listening while learning the names of the things and actions as they are identified; (3) oral expression-repeating and mastering the sounds and the meaning of the sounds associated with the things and actions: (4) substituting the visual symbols (words) for the sounds of the things and actions which becomes the process of reading: and (5) after mastering the symbols and meanings to imitate or reproduce these words and ideas in writing.

Many times we use the term 'readiness" to indicate a child preparation for beginning the school experiences. Readiness is the term used when referring to that multiplicity of sensory experiences with its consequential symbol development which has been judged to be necessary for a child to survive in the current of the mainstream. One of the stumbling blocks in effective education and effective communication is assuming either that a person has had enough or too little experience in term of what has been defined as readiness.

In Educational Cognitive Style, recognition is given to the fact that sensory input(experience) is essential for learning. Steps are taken to discover the preferences for the various sensory experiences. No judgement is assessed in terms of readiness.

Thus educational cognitive style examines preferences for sensory input:

1. Qualitative Visual - those different visual experiences which have to do with size, shape, color, height, depth, pattern, etc. (all experiences not associated with words and numbers).
2. Qualitative Tactile - those different experiences that have to do with feeling hot, cold, smoothness, softness, pressure, etc.
3. Qualitative Auditory - those different experiences that have to do with tone, pitch, beat, loudness, etc. (all experiences not included under words and numbers).
4. Qualitative Savory - those different experiences associated with tasting: sweetness, tartness, spicy hot, saltiness, etc.
5. Qualitative Olfactory - those different experiences associated with smelling: aromas, perfumes, smoke, etc.

How many times have parents warned their young children of the danger of touching hot kettles or stoves? It is only with the experience of feeling hotness that the child realizes that hot hurts and what hurts is dangerous. I recall in my file of experiences one that almost cost my life. My mother had warned me several times to stay away from the electrical outlet. One must realize, that time after time, I had seen my mother plug into that outlet and nothing bad or dangerous had ever happened to her. She had never exhibited fear when she went near the outlet. What I had witnessed was a lamp-light, a voice speaking from a box, or a motor start. It was a kind of magic and I wanted to make it work for me. One day while my mother was fixing her hair, one of her hair pins fell to the floor. Unbeknown to her I picked up the hair pin and inserted it into the outlet. Needless to say, that sensory experience shocked the point home, "Stay away from the outlet!"

Sensory Communication can be positive. Describing a kitten and how soft it is, can be made more meaningful with a live kitten present to be seen and felt. Communicating the similarities and differences between a kitten and a rabbit can become truly meaningful when children are allowed to experience the similarities and differences.

During the process of man's culturalization he has passed through many phases of language: in the beginning, the language of signs and grunts to the present, the language of printed and oral symbols. Although he has become sophisticated, he still practices his signs and grunts as a means of communication. Many times in order to receive the real message, the receiver must not only listen to the words but also observe the signs - the body language, the

tone of voice, etc. Educational Cognitive Style examines those areas of non-verbal communication which are influenced by culture.

1. Qualitative Receptive Empathetic - the sensitivity which one person has to understand how others feel so that he/she experiences some of the joy, sadness, elation, etc. being experienced by others.
2. Qualitative Receptive Esthetic - the sensitivity to appreciate esthetic values of art, music, poetry, drama, etc.
3. Qualitative Receptive Hjstrionics - the sensitivity to receive meaning through staged behavior or role playing.
4. Qualitative Receptive Kinesics - the sensitivity to receive meaning through the use of body language.
5. Qualitative Receptive Proxemics - the sensitivity to receive and understand the social space or distance desired by another.

Recently, I had occasion to advise a young man who was beginning his doctoral studies. I had him inventory his Educational Cognitive Style so that I could explain how he preferred to learn. When I informed him that he did not prefer to learn by listening, he was not surprised. He related to me that when he listened to people he was busy studying their mannerisms: looking at their poise; listening to the sincerity of their voices: studying their body language, the gestures, etc. The fact was that he was so interested in the non-verbal expression that the verbal lost its intent and significance.

In an article by Dr. Aaron Wolfgang, Expressing Yourself with Body Language. published by the Educational ABC of American Industry Resource Book 1978, re-

ceptive and expressive behaviors were analyzed in terms of proxemics, kinesics and para-linguistics. Dr. Wolfgang states that "non-verbal behaviors are interwoven with language and culture. They are important because unlike verbal behavior, non-verbal behavior is difficult to manipulate or falsify.....have been shown to have greater impact than languages, particularly in revealing emotions and attitudes....of different degrees of warmth or coldness toward others." He further advises that there are three important ways to use non-verbal behavior to communicate effectively so as to accomplish stated goals: (1) to demonstrate that one has good listening skills; (2) to make a good impression; (3) to behave in a manner to overcome stereotypes which may be in the other person's mind.

Needless to say, some individuals have learned to mask their non-verbal behavior but most people have not. Effective communication depends upon the individual receiving both verbal and non-verbal messages. Unless conscious effort is made to tune people in to both these levels of receiving, being able to receive the understanding one wishes is an elusive ghost.

In summary, the reception of information for effective communication demands that attention be paid to theoretical auditory and visual language, to sensory images and stimuli and to non-verbal expressions of behavior.

How individuals prefer to express themselves is an important element of effective communication. Preference for an activity is an indicator that a person feels comfortable during its performance and that he/she has achieved some success.

Educational Cognitive Style examines the preferences of several activities which people use to express their ideas, feelings and emotions.

1. Theoretical Expressive Visual Linguistics - a preference to write one's thoughts, feeling, emotions so that others may read them.
2. Theoretical Expressive Visual Qualitative - a preference to write numerical relationships.
3. Theoretical Expressive Auditory Linguistics - a preference to speak about one's ideas, feelings, and emotions.
4. Theoretical Expressive Auditory Qualitative - a preference to talk about numerical relationships.

Particular interest in communications should be paid to those individuals who prefer to use graphic, pictorial and visual presentations. These persons will draw a map to point out how to go from one place or another, will doodle or make drawings while listening etc. In the Educational Cognitive Style procedure, the activity is studied as:

Qualitative Expressive Visual/Graphic

Expressive non-verbal behaviors are examined in the Educational Cognitive Style process in terms of:

1. Qualitative Expressive Esthetics - the preference to express esthetic values in terms of art, music, poetry, drama, movement, etc.
2. Qualitative Expressive Histrionics - the preference to express oneself through role playing, or by disguising or hiding true feelings.
3. Qualitative Expressive Kinesics - the preference to express information through body movements.

4. Qualitative Expressive Transactional - the preference to lead or to convince others to follow.
5. Qualitative Expressive Ethic - the preference to behavior that indicates committment to task, duty, obligation.
6. Qualitative Expressive Temporal - preference to work through a time frame imposed by others.

Though some of the above elements may seem incongruous to communication, it should be emphasized that common preferences (receiver and expressor) for certain behaviors most certainly promote good communication. How many times have individuals been characterized or categorized as "arty-crafty","a born ham", "always center stage", "dramatic", "stone-faced", "talks with his hands", "true blue", "could sell a freezer to an Eskimo", "work by the clock", etc. Individuals so classified have communicated definite ideas about themselves if not by words then by actions, or by both.

The importance of setting as an essential of communication is aptly portrayed in the variety of newspaper, magazine, radio and television commercials. For the strong individualist there are the ads which insist, "I'd rather do it my way!"; there are those which seek to have the observer become one of the group and belong by doing what the group is doing; and there are still others which insist: follow the leader, do what the hero does, and mom and/or dad know(s) best. Those who are in media have come to realize that one setting for a message does not reach all; they custom tailor the setting of messages so that the individual can identify with the setting represented in the commercial.

In the Educational Cognitive Style approach, there are three basic settings. with a sub division in one: individual; peer or group: and authority subdivided into home or family and school or institutional.

Individual - sometimes referred to as independence - the individual prefer to use those methods, standards, values, etc. with which he/she is comfortable at arriving at conclusions and decisions which indicate assumption of responsibility for one's destiny.

Associate or Peer - the individual prefers to use his associates/peers as a reference upon which to make decisions.

Authority or Subordinate - the individual accepts the standards, the interpretation etc. of some person(s) whom he/she considers a superior and uses that (those) person(s) as the guide(s) in order to interpret material or arrive at conclusions.

By examining the setting which individuals utilize one begins to see that the verbal content per se of the message is not really important. The appeal of the message must be aimed at the receiver in the setting which is most comfortable. If the individual is led to believe that his decision is important. if the individual who wishes to identify with his associates or a group in which he participates is shown that he can identify with them and if the individual who wishes support from a family member, or a hero, or an authority figure attains that support then the intended message will be received. Reality demonstrates effectively that no one message can be so universal in appeal that

it presents the same meaning to all. That is why the communicator must examine the receiver(s) of his/her message. Once he/she has decided upon the setting the receiver finds comfortable the approach can be personalized to achieve greater meaning and effect.

At the beginning of this discourse, reference was made to the obstacles in the path of effective communication. Some of them had to do with the setting directly and indirectly: e.g. status difference between sender and receiver: prestige of sender as it influences receiver; maturity levels and experiences of sender and receiver.

A few years ago, I inventoried my niece's cognitive style. Within reasonable limits, she is a person who gets along fairly well in all groups. After she completed the inventory, I went over her learning style with her and explained that she really didn't like to learn in groups or to go to other classmates for help. Her comment was both relevant and to the point. "Why should I? I feel I know as much or more than they do. Besides they waste too much time. I'd rather do the work myself or go to my teacher or father for help."

In another instance, I was working with a group of college seniors, helping them discover their cognitive style. One should keep in mind that this was the first time that I had seen them or worked with them. They had never had direct contact with the theory or the content of cognitive style. My concluding words before I administered the inventory were, "Now if anybody has any questions or needs any help, just raise your hand and I'll be there to help you." Within five minutes, there were questions - not all addressed to me however! Two or three students began quietly talking to each other, asking specific questions

which I felt that only I could answer. Finally one student in the group asked me the questions, received the answers and went back and gave them to the group.

On several occasions, I have had parents who have come to me and said, "My son/daughter tells me how you want things done and they have to be done that way, no matter what other way I show him/her."

By addressing the modality or setting in which a person prefers to exchange ideas, communication can be made more effective.

The process of communication cannot exist without reasoning. Communication is an interaction, it is a conveyance, it is an imparting and exchanging of data, information, etc. It demands mediation from one step or stage to another. How people accept the information, recognize it, interpret it, analyze it, evaluate it, react to it are the essentials of the reasoning and the communication process. People reason according to inductive and deductive procedures. By examining how individuals feel most comfortable in the reasoning process and preparing communication accordingly can effectively promote better communications.

There are individuals who feel most comfortable reasoning according to rules and definite procedures. Theirs is a precise world - right is right, wrong is wrong. black is black, and white is white. There are precise ways of doing things and when you follow those procedures nothing goes wrong; vice-versa, when you don't follow those rules, they become confused and everything seems to go wrong for them.

There are individuals who use the rules and the precise procedures to show how they don't work in particular circumstances. They are the devil's advocates they are the questioners, they are the discriminators: they are the inventors.

Still another group seeks relationships between rules and theory and practical applications. They are the synthesizers who develop a number of related incidents into a new whole or break down a situation into its component parts.

And yet another group approaches decision making very methodically and completely. These are the individuals who must have all information or as much as possible before attempting to make a decision. They combine all of the preceding aspects of the reasoning process - they seek the rules, search for the exceptions, examine the relationships, and after being satisfied with the information received and examined, make a decision.

The deductive reasoner is the individual who moves from the whole to its parts. He is the individual who reasons from majors to particulars. He prefers logic. He prefers predictability.

In educational cognitive style, the reasoning patterns are examined to determine individual preference.

Magnitude - the reasoning process which attempts to define, classify, limit and categorize received information according to predetermined norms, rules, standards, traditions, etc.

Difference - the reasoning process which attempts to compare and contrast received information to discover discrepancies or exceptions to predetermined rules, norms, standards, traditions, etc.

Relationships - the reasoning process which attempts to discover the relationship which exists between received information and predetermined rules, norms, standards, traditions, etc. so as to synthesize a series of related incidents into a unified meaning or analyze situations into component parts.

Appraisal - that reasoning process which uses all the foregoing modalities of reasoning.

Deductive - reasoning process using a step by step method similar to that used in mathematics, geometry or syllogistic reasoning.

By understanding the reasoning pattern which people use can help the communicator to prepare his message to meet some of the needs of the receiver.

Carl Jung, the Swiss psychoanalyst in his Psychological Types written in the 1920 said that every individual develops a primacy in one of four major behavioral functions. Jung, in essence, was referring to cognitive style as one can see from examining his behavioral functions.

Intuiting - speculating, imagining, envisioning, daydreaming, creating, innovating

Thinking - rationally deducting, analyzing, ordering facts, identifying and weighing options, reflecting

Feeling - empathizing, perceiving, associating, remembering, relating

Sensing - acting-doing, relying on sensory data, competing, fighting for existence, striving for results, living in the here and now.

The Intuitor is the loner, is constantly asking questions, is not satisfied because the teacher or somebody in authority says it is so; must discover for himself/herself. The Thinker is proud because he is right, is structured and uses systematic approaches to learning, is interested in facts, is interested in systems, collecting facts and arrive at reality decisions.
The Feeler is emotional, is empathetic and sentimental... is involved interpersonally....is interested in past experiences and memories.
The Sensor is the doer, is interested in touching, tasting, smelling, seeing, hearing in order to know reality, is interested in accomplishment.

Though Carl Jung attempted in his way to assist in understanding how people manage themselves and their environments his methods still left subjective areas in identifying behavioral types. It was Dr. Joseph Hill who put the theories of men such as Jung, Dewey, Piaget, Montessorri, Bruner, Kagan, etc. into a practical framework so as to identify the many elements which comprise a person's learning or cognitive style. Hill did not seek a sweeping category to identify behavioral types, rather he approached it in terms of behavioral elements which compose learning and adjustment.

Those professionals who have adopted Hill's model of identifying elements of cognitive style have further developed it. There are now four different instruments which can be used to identify various elements of cognitive style: an

observation instrument, an interview instrument, a performance instrument, and a statement response one. Each has its particular purpose and can be used in specially defined situations to accurately determine how an individual prefers to approach a learning task.

The observation instrument uses a framework of specific observable behaviors related to the cognitive style element. The person using the instrument can use it both as a motivator in terms of activity and a guide to observe.

The interview instrument is one where the interviewer asks the interviewee specific questions related to general practices of learning and adjustment.

The performance instrument asks an individual to do specific tasks. As the tasks are performed the administrator rates the facility and/or ease of accomplishment.

The statement-response instrument presents the individual with a series of statements which describe learning or adjustment situations to which he must decide his/her preference.

By using the results of the various cognitive style instruments, the following areas of information can be crystallized: how a person prefers to receive a message; the kind of setting he/she likes to work in; the reasoning patterns preferred to make decisions; and the method preferred for expressing a message.

Once this information is assembled, the communication process can be made more personal and hence more effective

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